

Remarks

In the present response, claims 1-20 are presented for examination.

Drawing Objections

The drawings are objected to under 37 CFR 1.83(a) as not showing every feature specified in the claims. This rejection is moot since claim 18 is amended to delete the element: "rounded transition means is provided between the interior reflecting surface of the hollow reflector means and the collimating reflector means for providing a diffusing reflective surface."

Claim Rejections: 35 USC § 112

Claims 1, 10, 18, and 20 are rejected under 35 USC § 112, first paragraph, as failing to comply with the written description since these claims recite first and second reflectors "disposed on" the exit aperture. These rejections are moot since these terms are deleted from the claims. By way of example, claim 1 is amended to recite first and second reflectors "joined to" a side of the exit aperture. Support for this amendment is found at p. 16, lines 7-9.

Claim Rejections: 35 USC § 102(e)

Claims 1-20 are rejected under 35 USC § 102(e) as being anticipated by USPN 6,616,307 (Haenen). These rejections are traversed.

The claims recite one or more elements not taught in Haenen. Some examples are provided below for the independent claims.

Claim 1

As one example, claim 1 recites a light source that moves along a displacement path to illuminate a scan region of an object that is positioned on a platen. By contrast, Haenen teaches a lamp housing that is fixed to a ceiling.

Anticipation under section 102 can be found only if a single reference shows exactly what is claimed (see *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773

(Fed. Cir. 1985)). For at least these reasons, independent claim 1 and its dependent claims are not anticipated by Haenen.

As another example, claim 1 recites that the hollow reflector is formed to comprise both the interior reflective surface and the first and second reflectors. By contrast, Haenen teaches that reflector 11 and reflector housing 3 are formed of separate elements.

For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference (see *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990)). For at least these reasons, independent claim 1 and its dependent claims are not anticipated by Haenen.

Claim 10

As one example, claim 10 recites a light source that illuminates a scan region on an object that is positioned on a platen. By contrast, Haenen teaches a lamp housing that is fixed to a ceiling.

Anticipation under section 102 can be found only if a single reference shows exactly what is claimed (see *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985)). For at least these reasons, independent claim 10 and its dependent claims are not anticipated by Haenen.

As another example, claim 10 recites that the first and second reflectors form a sharp corner at a junction with the interior reflective surface of the body. The Examiner produces new drawings not taught in Haenan to allegedly anticipate this recitation. The Examiner's drawings are contrary to the teachings in Haenen. Specifically, Haenen states that window 10 is formed from the surface of the reflector 11, not the surface of the reflector housing 3 or portions 31 and 32 (see Haenen at column 4, lines 58-60). The drawings by the Examiner have changed the teachings in Haenen. These drawings are not a predictable variation of Haenen since the teachings in Haenen would have to be significantly modified to arrive at the Examiner's drawings.

For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference (see *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990)). For at least these reasons, independent claim 10 and its dependent claims are not anticipated by Haenen.

As yet another example, claim 10 recites that the sharp corner minimizes scattering and improves collimation of the at least partially collimating light passing through the exit aperture. Nowhere does Haenen teach or even suggest a corner that performs this function.

Anticipation is established only when a single prior art reference discloses each and every element of a claimed invention united in the same way (see *RCA Corp. v. Applied Digital Data Systems, Inc.*, 730 F.2d 1440, 1444 (Fed. Cir. 1984)). For at least these reasons, independent claim 10 and its dependent claims are not anticipated by Haenen.

Claim 18

As one example, claim 18 recites a light source means that moves along a displacement path to illuminate a scan region of an object. By contrast, Haenen teaches a lamp housing that is fixed to a ceiling.

Anticipation under section 102 can be found only if a single reference shows exactly what is claimed (see *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985)). For at least these reasons, independent claim 18 and its dependent claims are not anticipated by Haenen.

As another example, claim 18 recites that the hollow reflector means is **integrally formed** to comprise both the collimating reflector means and the interior reflecting surface. By contrast, Haenen teaches that reflector 11 and reflector housing 3 are formed of separate elements.

For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference (see *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990)). For at least these reasons, independent claim 18 and its dependent claims are not anticipated by Haenen.

Claim 20

As one example, claim 20 recites moving the hollow reflector along a displacement path to direct light exiting through the aperture to scan an object that is positioned on a transparent platen. By contrast, Haenen teaches a lamp housing that is fixed to a ceiling.

Anticipation under section 102 can be found only if a single reference shows exactly what is claimed (see *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773

(Fed. Cir. 1985)). For at least these reasons, independent claim 20 is not anticipated by Haenen.

As another example, claim 20 recites **integrally forming** the hollow reflector with the collimating reflector. By contrast, Haenen teaches that reflector 11 and reflector housing 3 are formed of separate elements.

For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference (see *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990)). For at least these reasons, independent claim 20 is not anticipated by Haenen.

Claim Rejections: 35 USC § 103(a)

Claims 1-9 are rejected under 35 USC § 103(a) as being unpatentable over USPN 6,186,649 (Zou). These rejections are traversed.

Each of the claims recites one or more elements that are not taught or suggested in Zou. These missing elements show that the differences between the combined teachings in the art and the recitations in the claims are great. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art.

As one example, the independent claim 1 recites that the hollow reflector is formed to comprise both the interior reflective surface and the first and second reflectors. The Examiner argues that elements 420 and 422 in Zou are the claimed first and second reflectors. These elements are formed on a transparent optical element 416 that is separate from the illumination source 430 (see Fig. 12 in Zou).

The differences between the claims and the teachings in the art are great since the references fail to teach or suggest all of the claim elements. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art.

For at least these reasons, the claims are allowable over Zou.

CONCLUSION

In view of the above, Applicants believe that all pending claims are in condition for allowance. Allowance of these claims is respectfully requested.

Any inquiry regarding this Amendment and Response should be directed to Philip S. Lyren at Telephone No. 832-236-5529. In addition, all correspondence should continue to be directed to the following address:

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Respectfully submitted,

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